



City of Asheville

Kimley-Horn

Nelson\Nygaard

Toole Design

Kostelec Planning

Accessible Design for the Blind

Mobility Plan Update Materials
September 2015

Table of Contents

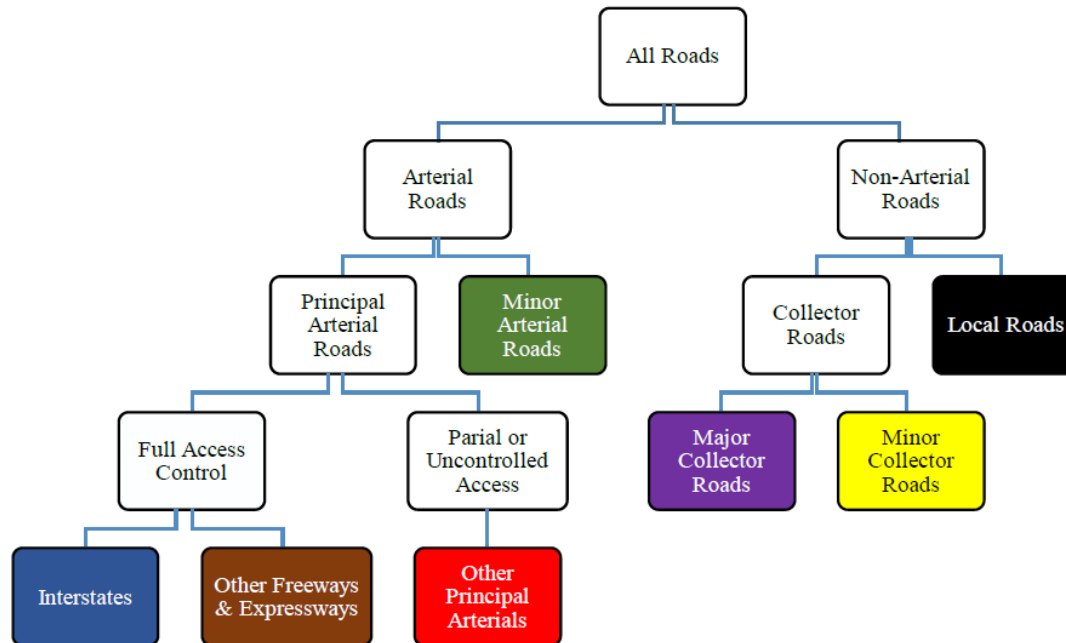
... An update of Asheville in Motion

- Conventional Street Typology
- Asheville's Street Typology
- Asheville's Community Typology
- Street Design Priority Matrix
- Next Steps...

Conventional Street Typology

... a discussion about functional classification.

Conventional Street Typology

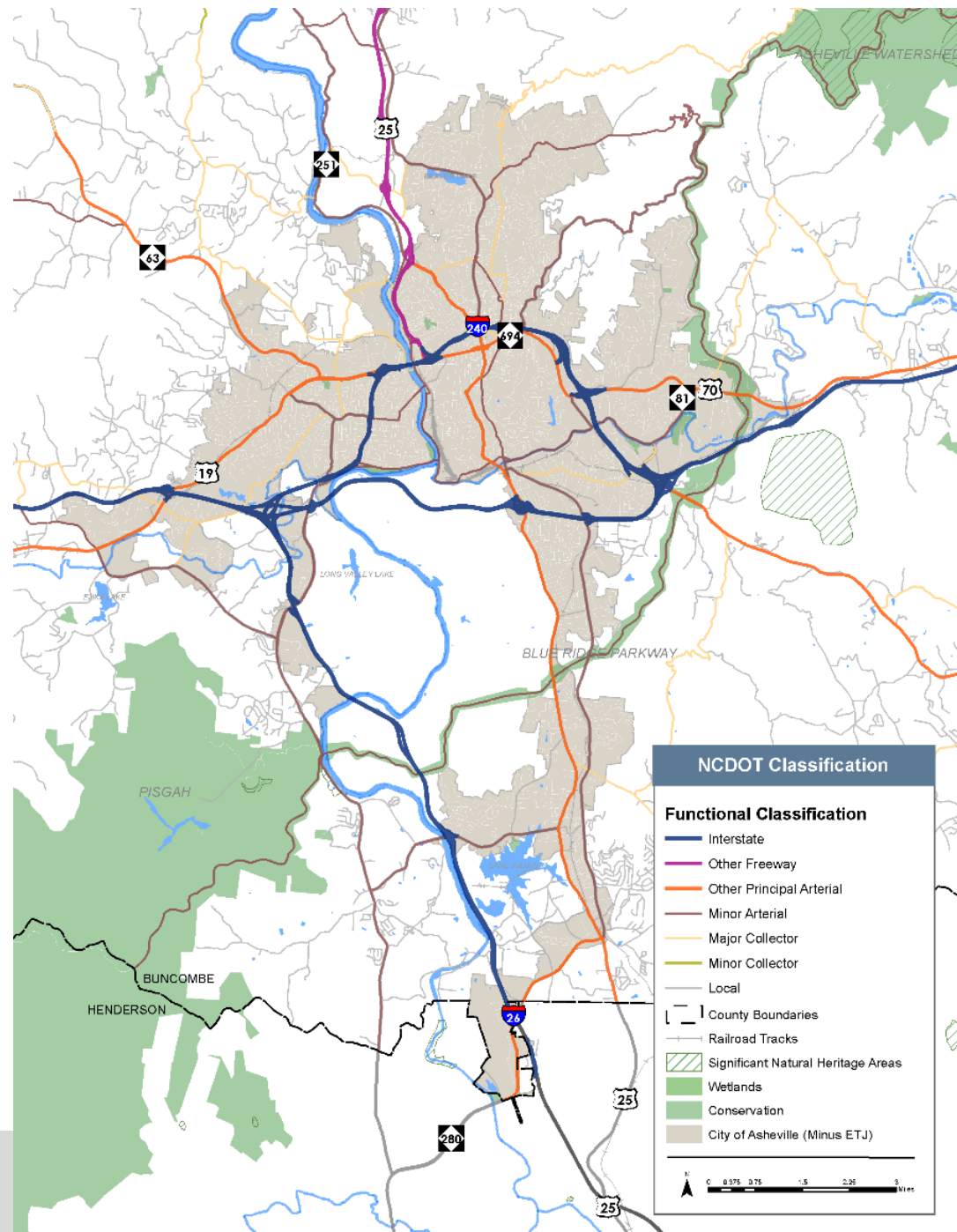


Functional Classification → embrace the movement of automobiles and focuses on vehicle throughput and capacity with little or no consideration for multimodal elements.

Functional Classification

Typical Characteristics	Arterials				Collectors		Local
	Interstates	Freeways and Expressways	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	
Lane Width (Feet)	12	11 - 12	11 - 12	10 - 12	10 - 12	10 - 11	8 - 10
Inside Shoulder Width (Feet)	4 - 12	0 - 6	0	0	0	0	0
Outside Shoulder Width (Feet)	10 - 12	8 - 12	8 - 12	4 - 8	1 - 6	1 - 4	0 - 2
AADT (Rural) (000's)	12 - 34	4 - 18.5	2 - 8.5	1.5 - 6	0.3 - 2.6	0.2 - 1.1	0.1 - 0.4
AADT (Urban) (000's)	35 - 129	13 - 55	7 - 27	3 - 14	1.1 - 6.3		0.1 - 0.7
Divided/Undivided	Divided	Either	Either	Undivided	Undivided	Undivided	Undivided
Access:	Fully Controlled	Partial/Full Control	Partial/Uncontrolled	Uncontrolled	Uncontrolled	Uncontrolled	Uncontrolled

Asheville – Functional Classification



The Challenge

Pros and Cons of Functional Classification

Pros

- Aligns with statewide planning
- Brings continuity across a broad statewide /national geography
- Useful for regional travel modeling

Cons

- Doesn't consider community context
- Offers little insight regarding future design improvements
- Doesn't provide a methodology to balance competing interests





...community plans require more detail than what is provided by functional class

Street Typology

...an opportunity to align context with transportation

Street Type Name

Explanation and description

Characteristics					
Functional Classification					
Local Examples					
Typical Section					
Other					



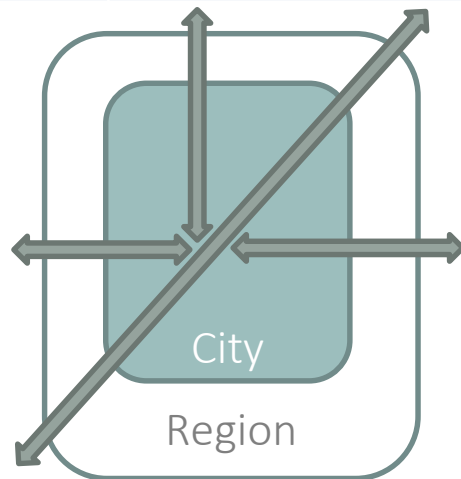
Freeways & Expressways

Freeways and Expressways are controlled access streets. These streets are multi-lane roadways meant for higher speeds and longer distance travel. They carry traffic through the region.

Characteristics



Functional Classification	Freeways & Interstates
Local Examples	I-40, I-26, I-240
Typical Section	4+ travel lanes
Other	Partial or full access control, exclusive to vehicular travel



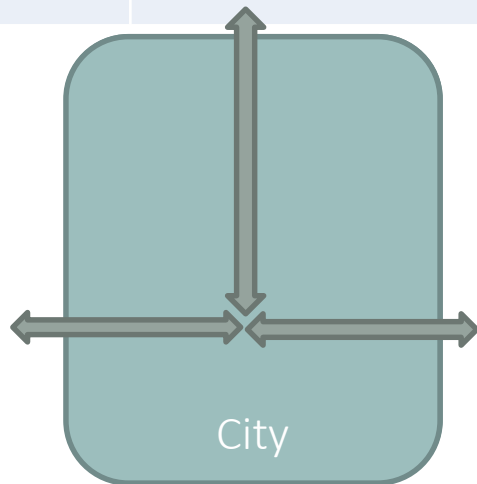
Workhorse Streets

Workhorse streets are multi-lane thoroughfares that sometimes include a landscaped median. They require safe separation between bicyclists, pedestrians, and the travel way. Workhorse streets accommodate travel into and out of the city with connections to the transportation network.

Characteristics



Functional Classification	Principal Arterial/Minor Arterial
Local Examples	Patton Avenue, Leicester Highway
Typical Section	4+ travel lanes
Other	Relatively high traffic volumes



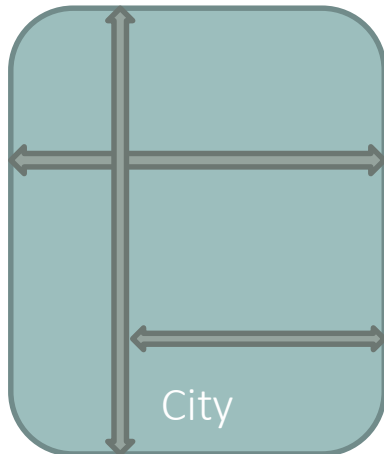
City Connectors

City Connectors look similar to Workhorse Streets but have a greater role in balancing local land access with moving people and goods. Typically, they have lower travel speeds and traffic volumes than Workhorse Streets. City Connectors also tend to be limited in width by the built environment that they serve.

Characteristics



Functional Classification	Principal Arterial/Minor Arterial
Local Examples	Biltmore Avenue, Merrimon Avenue
Typical Section	3-4 travel lanes
Other	Logical cap to number of travel lanes that are provided



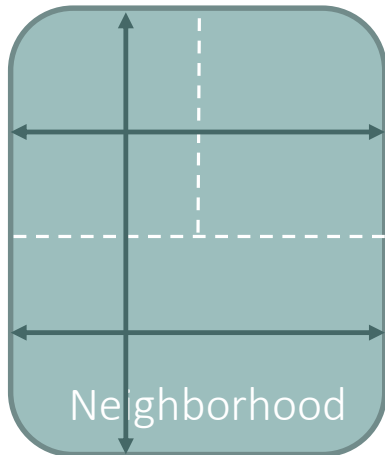
Neighborhood Collectors

Neighborhood Collectors collect neighborhood traffic and connect to points within and between existing neighborhoods. They balance mobility with access by supporting local development at the neighborhood level. They are primarily a conduit for local traffic during off-peak periods. Slower travel speeds and no-street parking are often present.

Characteristics



Functional Classification	Collector
Local Examples	Charlotte Street, Haywood Road
Typical Section	2-3 travel lanes
Other	Logical cap to number of travel lanes provided.



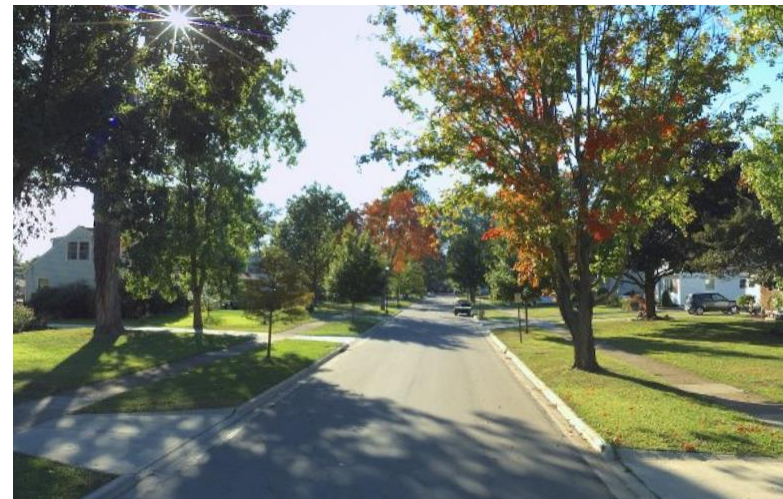
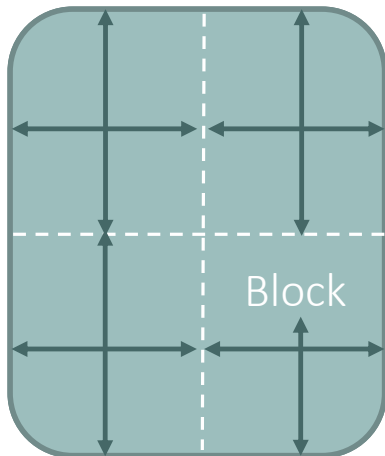
Locals

Local streets are slow-moving streets. These streets can be urban (including alleys) or suburban (including subdivided neighborhood streets) and even rural. Their exclusive purpose is to provide block-level, local access and provide safe connectivity to higher order streets.

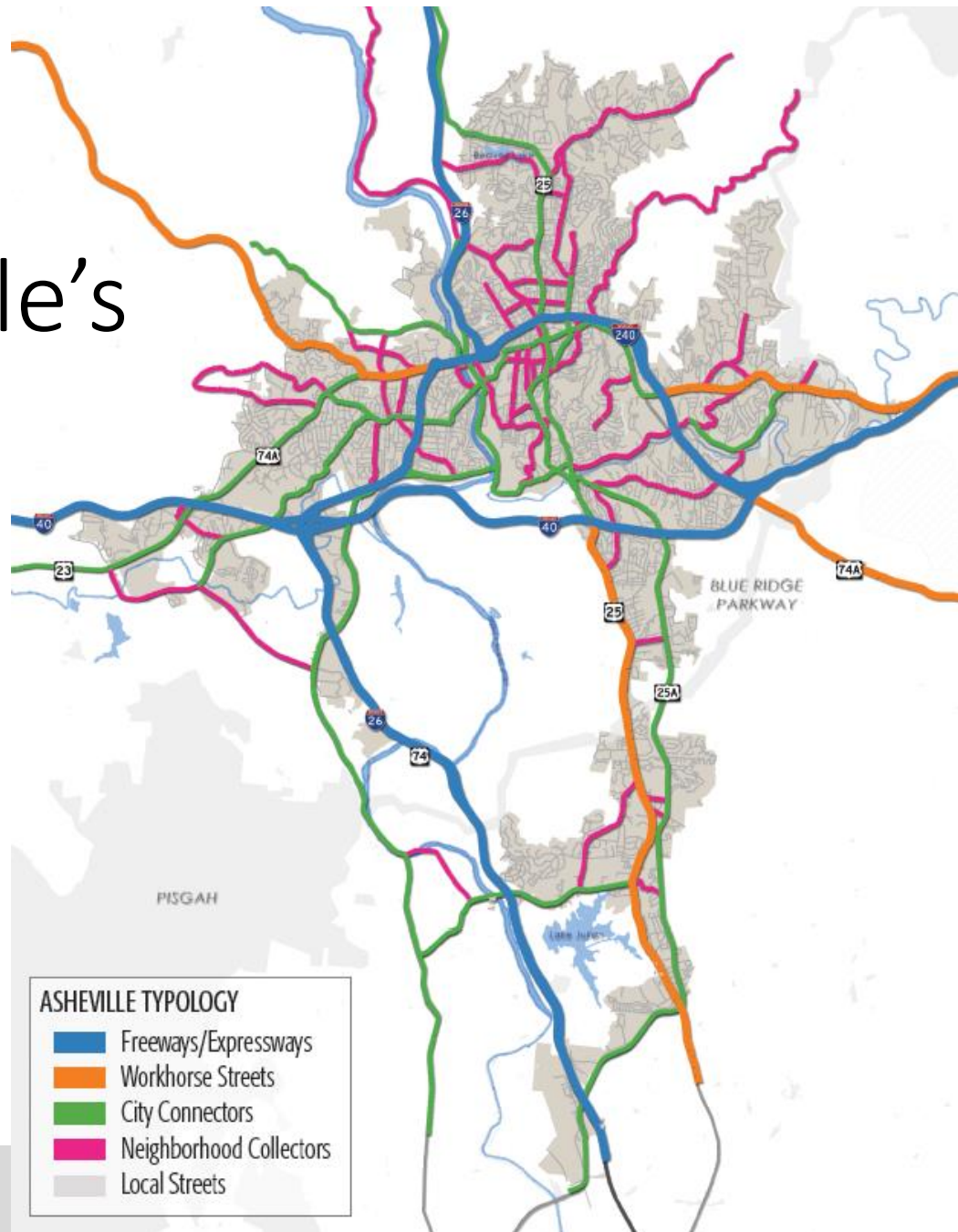
Characteristics



Functional Classification	Collector, Local
Local Examples	
Typical Section	2 travel lanes
Other	Logical cap to number of travel lanes provided.



Applying Asheville's Street Typology



Community Typology

...creating a vision for land use specific to Asheville

Community Types

Overview

- Represent existing or envisioned land use types and development patterns
- Capture the look or feel of a place
- Have unique settings, patterns, and qualities
- Not intended to:
 - Be completely synonymous with local zoning ordinances
 - Replace language in locally-adopted land use plans

Categories

- Residential
- Traditional Neighborhood
- Downtown
- Suburban Centers and Corridors
- Regional Centers and Corridors
- Manufacturing, Logistics, and Aerospace
- Craft Tourism
- Campus
- Parks and Open Space

Typical Land Uses



Airport



**Civic &
Institutional**



Hotel



Industrial



Medical



Multi-Family



Office



**Parks &
Open Space**



Restaurant



Retail



Single-Family



Varies

Transportation Accessibility



Automobile



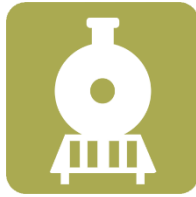
Pedestrian



Transit



Bicycle



Rail



Varies

Residential

Residential areas are predominantly single-family neighborhoods and detached homes on individual lots. Unlike Traditional Neighborhoods these areas lack supporting neighborhood commercial uses. Limited quantities of multi-family development also are found in these areas. The transportation is often organized around larger blocks and curvilinear streets with low degrees of connectivity.

Sample Subcategories

Rural Living

Senior Living

Mountain Living

Suburban Living

Mobile Home Community

Typical Land Uses

Primary



Secondary

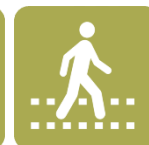


Transportation Accessibility

Primary



Secondary



Traditional Neighborhood

Traditional Neighborhoods include a variety of housing types, residential densities, goods, and services supported by a connected transportation system with regular blocks. The design and scale encourage active living and affords the ability for residents to live, work, shop, and play within a walkable community. Traditional Neighborhoods include small-scale commercial areas that provide goods and service to surrounding residences.

Sample Subcategories

Mixed-Density Residential Neighborhood
Small Lot Residential
Neighborhood Center

Typical Land Uses

Primary



Secondary



Transportation Accessibility

Primary



Secondary



Downtown

The Downtown area represents the civic, entertainment, and cultural heart of western North Carolina. Small blocks with streets designed to encourage pedestrian activity are fronted by multi-story buildings. Residential units above storefronts are prevalent. Ceremonial streets and plazas anchor key nodes and serve as gathering places and accommodate special events. The compact, walkable environment and mix of residential and non-residential uses support multiple modes of transportation and become the transit hub of the community.

Sample Subcategories

Typical Land Uses

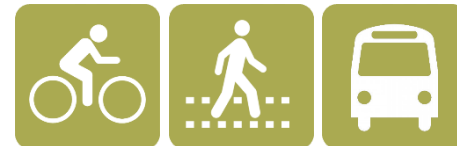
Primary



Secondary

Transportation Accessibility

Primary



Secondary



Suburban Centers and Corridors

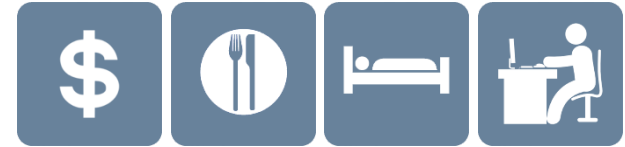
Suburban Centers and Corridors serve the daily needs of nearby residents and tend to locate along roads with higher traffic volumes and near prominent intersections. These areas typically include multi-tenant strip centers and big box stores. Smaller professional offices not part of the city's large medical campuses are included. Buildings typically are set back from the road behind large surface parking lots with limited connectivity between adjacent businesses.

Sample Subcategories

- Suburban Commercial
- Suburban Office
- Town Center
- Secondary School Facilities

Typical Land Uses

Primary



Secondary



Transportation Accessibility

Primary



Secondary



Regional Centers and Corridors

Regional Centers and Corridors attract people beyond Asheville for shopping, entertainment, and employment. These areas typically are large scale, master-planned developments built in phases with a mix of residential, non-residential, and civic uses. Regional Centers and Corridors locate near major highways to ensure ease of access for longer trips. These areas include major shopping centers, tourist attractions, office parks, and medical campuses.

Sample Subcategories

- Regional Commercial
- Regional Office
- Health Care Campus
- Lifestyle Center

Typical Land Uses

Primary



Secondary



Transportation Accessibility

Primary



Secondary



Manufacturing, Logistics, and Aerospace

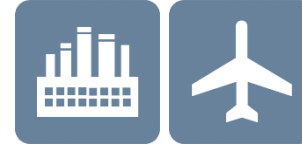
Manufacturing, Logistics, and Aerospace areas support large-scale manufacturing and production, including assembly and processing, regional warehousing and distribution, bulk storage, and utilities. These areas are found near major transportation corridors (highway or rail) and generally are buffered from surrounding development. Clusters of uses that support or serve heavy industry generally locate nearby. The Asheville Regional Airport and adjacent supporting facilities are included.

Sample Subcategories

Light Industrial
Heavy Industrial
Airport

Typical Land Uses

Primary



Secondary



Transportation Accessibility

Primary



Secondary



Craft Tourism

Craft Tourism areas combine traditional manufacturing and production facilities with destination features that attract visitors. These areas include large-scale craft breweries with on-site production, taprooms, restaurants, gift shops, and scheduled tours. Art districts with groups of public and private multi-tenant studios are included. These facilities offer classes and sponsor events that attract visitors during evenings and weekends. Craft Tourism areas require a balance between manufacturing (production and shipping) and tourism.

Sample Subcategories

Destination Brewery

Artist Colony

Typical Land Uses

Primary



Secondary

Transportation Accessibility

Primary



Secondary



Campus

Campus areas are developments with multiple buildings and include higher education institutions as well as some corporate campuses. Academic buildings, residence halls, athletic facilities, and other infrastructure support higher education institutions. Buildings typically orient around a highly-walkable green with a network of streets and pedestrian pathways. Parking is provided in structured parking or large surface lots. Dedicated open space allow for public gathering and recreation. Connections to off campus complementary uses are necessary.

Sample Subcategories

Residential Campus
Commuter Campus
Corporate Campus

Typical Land Uses

Primary



Secondary

Transportation Accessibility

Primary



Secondary

Parks and Open Space

Outdoor community space can take a variety of forms including active and passive. Most generally, these areas include community and regional parks as well as preservation and open space areas. Ensuring that parks are well-connected to the populations they serve is essential. Anticipating the need for additional capacity and providing it in the most efficient and logical areas is the role of a parks and recreation master plan.

Sample Subcategories

Regional Parks
Protected Open Space
Golf and Country Club

Typical Land Uses

Primary



Secondary

Transportation Accessibility

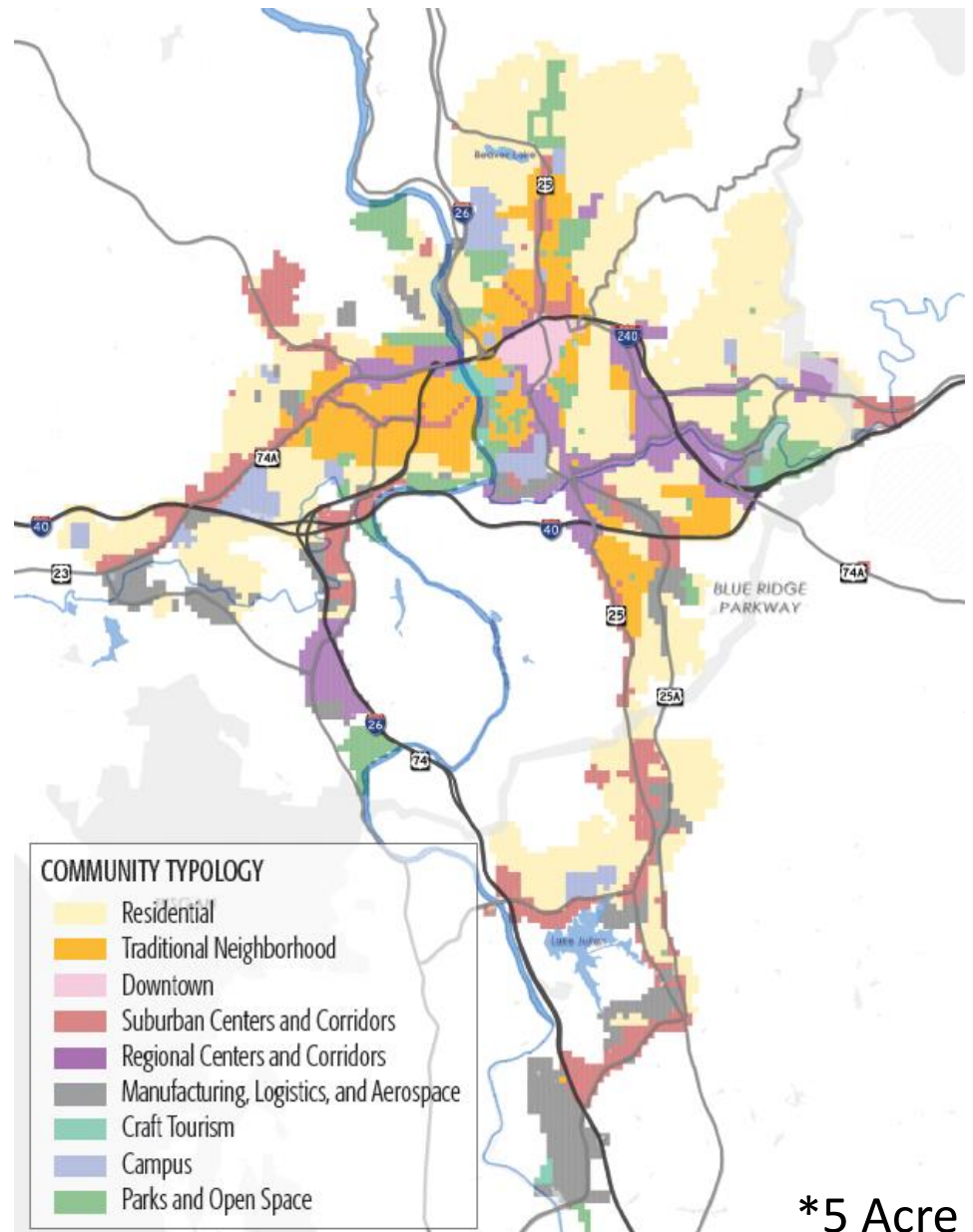
Primary



Secondary

Community typology

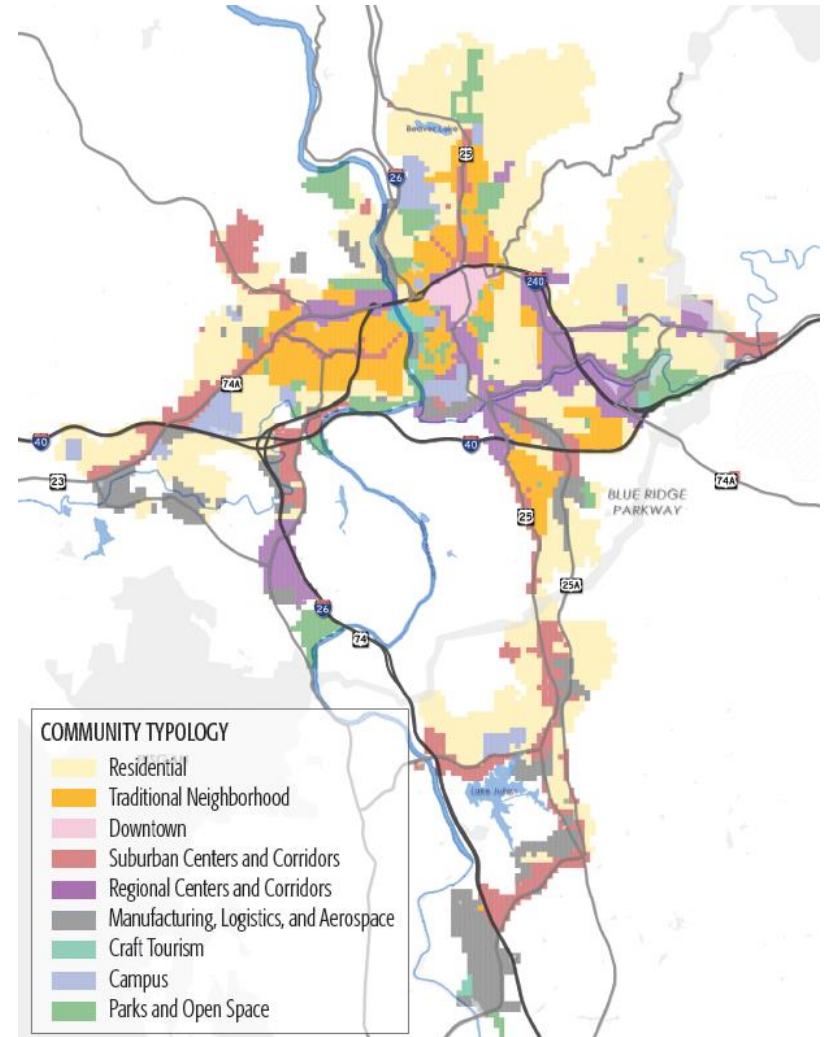
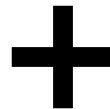
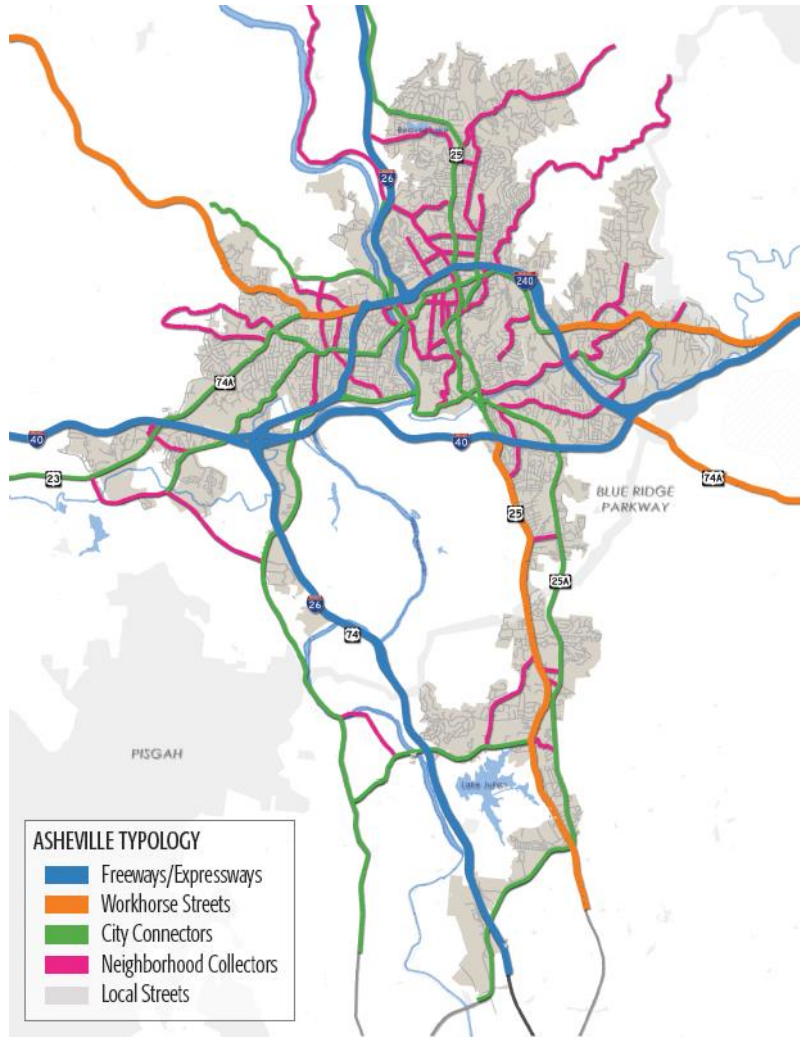
	Community Type
Residential	Residential
	Traditional Design
Mixed-Use	Downtown
	Campus
Commerce	Suburban Centers and Corridors
	Regional Centers and Corridors
Industry	Manufacturing, Logistics, and Aerospace
	Craft Tourism
Uncategorized	Parks and Open Space



*5 Acre Grid

Establishing a Strategy

How to blend the community typology and street typology together....



Asheville's Complete Streets Policy

Complete Streets principles will be applied in all street construction, retrofit, and reconstruction projects except in unusual or extraordinary circumstances contained below.

1. Pedestrians and bicyclists are prohibited by law from using the facility.
2. Where existing right-of-way does not allow for the accommodation of all users. In this case alternatives shall be explored such as obtaining additional right-of-way, use of revised travel lane configurations, paved shoulders, signage, traffic calming, education or enforcement to accommodate pedestrians, cyclists, transit vehicles and riders and persons with disabilities.
3. The cost of establishing walkways or bikeways or other accommodations would be disproportionate to the need, particularly if alternative facilities are available within a reasonable walking and/or bicycling distance.
4. Where application of Complete Streets principles is unnecessary or inappropriate because it would be contrary to public safety and increase risk of injury or death.
5. The construction is not practically feasible or cost effective because of unreasonable adverse impacts on the environment or on neighboring land uses, including impact from right-of-way acquisition.
6. Ordinary maintenance activities designed to keep street and other transportation assets in serviceable condition or when interim measures are implemented on temporary detour or haul routes.

Street Types in a Diversity of Settings

Street Types	Community Type
Residential	Residential
	Traditional Design
Mixed-Use	Downtown
	Campus
Commerce	Suburban Centers and Corridors
	Regional Centers and Corridors
Industrial	Manufacturing, Logistics, and Aerospace
	Craft Tourism
Uncategorized	Parks and Open Space

Mixed-Use

Places that blend opportunities to live, work, and plan

- Increased pedestrian activity
- Pedestrian-oriented development
- Buildings oriented to the street
- Maximized on-street parking

Residential

Areas that serve primarily as homes as well as schools and churches

- Pedestrian activities
- Slower vehicular speeds
- On-street parking where reasonable

Industrial

Manufacturing, assembly, and logistical land uses

- Truck traffic
- Emphasis on traffic flow

Commercial

Areas that are focused on trade and service including retail, office, and institutional uses

- **Emphasis on travel**
- Less on-street parking
- Lower pedestrian activity

next steps →

Next steps

- Again acceptance on an integrated strategy for street design decision making
- Establish a set of design principles for ideal conditions and constrained settings (places where we don't have enough right-of-way)
- Develop a method for prioritizing capital improvements for transportation projects
- Create summary report (October 2015)
- Public Rollout (October/November 2015)